GOOLY CONSULTANCY SERVICES
ISO 9001 : 2015 Certified & NABL Accreditated Laboratory as per ISO/IEC - 17025 - 2017
Corporate off : No. 230, Opp. G.R. Lavender Apartments, Sai Enclave Layout, Kothanur Dinne, J.P. Nagar 8th Phase, Bangalore - 560 076.
Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

TEST REPORT ON PHYSICAL PROPERTIES OF CEMENT

me of Client:	Bruhat Bangalore Mahanagara Palike
ldress:	Yelahanka Division
ckage No:	Package - 01
me of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
me Contractor:	M/s Sathya Constructions
me of PMC:	M/s Gooly Consultancy services, Bangalore
te of Receipt:	13-06-2020
mple ID No:	00613-7/1
mpling :	Sample Received from the site and Tested
mple Identification*:	Priya OPC 53 grade
eference to BIS codes:	**Test Method:**
	IS 4031(Part 1):1996(RA 2016) Determination Of Fineness By Dry Sieving
	IS 4031(Part 3):1988 (RA 2019) Determination Of Soundness
	IS 4031 (Part 4):1988 (RA 2019) Determination Of Consistency Of Standard Cement Paste
	IS 4031 (Part 5):1988 (RA 2019) Determination Of Initial & Final Setting Time
	IS 4031 (Part 6):1988 (RA 2019) Determination Of Compressive Strength
	IS 4031 (Part 11):1988 (RA 2019) Determination Of Density
	Specification :
	IS 269 : 2015 Ordinary Portland Cement
ondition of sample:	Satisfactory
ate of test:	22-06-2020 to 20-07-2020

Sl.No	Physical properties	Results	Units	Requirement as per IS 269: 2015		
				33 Grade	43 Grade	53 Grade
1	Standard consistency	30.5	%	Not specified	Not specified	Not specified
2	Initial setting time	160	minutes	Min 30 minutes	Min 30 minutes	Min 30 minutes
3	Final Setting time	359	minutes	Max 600 minutes	Max 600 minutes	Max 600 minutes
4	Fineness by dry sieving	9.3	%	–	–	–
6	Soundness (Le Chatelier's Method)	1	mm	Max 10 mm	Max 10 mm	Max 10 mm
8	Density	3.15	g/cm^3	–	–	–

AE-2 AEE

AE-02

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nple ID No: 00613-7/1

.No	Physical properties	Results	Units	Requirement as per IS 269: 2015		
				33 Grade	43 Grade	53 Grade
9	Compressive Strength					
	3 Days	28.5	N/mm^2	Min 16 N/mm^2	Min 23 N/mm^2	Min 27 N/mm^2
	7 Days	38.0	N/mm^2	Min 22 N/mm^2	Min 33 N/mm^2	Min 37 N/mm^2
	28 Days	45.0	N/mm^2	Min 33 N/mm^2, Max 48 N/mm^2	Min 43 N/mm^2, Max 58 N/mm^2	Min 53 N/mm^2

AE-2

A.E.E

emarks:

The test results pertain to the number of sample Received and Tested
Any correction in the report will make this report invalid.
This report without prior written approval should not be reproduced or published in full or part.
Samples will be disposed after 90 days from the date of issue of test certificate.

epared By: Tested By:
ıshpa D B Sree Charan S

Project Manager

AE-02

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TEST REPORT ON CEMENT CONCRETE CUBES

ame of Client: Bruhat Bangalore Mahanagara Palike

ddress: Yelahanka Division

ackage No: Package - 01

ame of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division. (Package -01)

ame of Contractor: M/s Sathya Constructions

ame of PMC: M/s Gooly Consultancy services, Bangalore

ample lentification*: C C Cube / 150mmx150mmx150mm / M- 20 / 28 days Compressive Strength

eference to BIS codes: Test Method:

IS 516 : 1959 (RA 2018) Methods Of Tests For Strength Of Concrete Cl 5

Specification:

IS 456 : 2000 (RA 2016) Plain And Reinforced Concrete - Code Of Practice

ondition of sample: Satisfactory

ompressive strength :

Sl. No	Sample Identification mark on CC Cubes	Grade of concrete	Date of Casting	Date of Testing	Dimension of the Specimen (mm)	Cross sectional area (Sq.mm)	Weight of cube (kg)	Failure Load (kN)	Compressive strength (N/mm²)	Average Compressive strength of 3 Cubes (N/mm²)
1	1/1	M-20	30-Jun-20	28-Jul-20	150*150 *150	22500	8.255	490	21.78	21.6
	1/2	M-20	30-Jun-20	28-Jul-20	150*150 *150	22500	8.073	477	21.20	
	1/3	M-20	30-Jun-20	28-Jul-20	150*150 *150	22500	8.064	488	21.69	
2	1/1	M-20	01-Jul-20	29-Jul-20	150*150 *150	22500	8.255	455	20.23	21.0
	1/2	M-20	01-Jul-20	29-Jul-20	150*150 *150	22500	8.073	495	22.00	
	1/3	M-20	01-Jul-20	29-Jul-20	150*150 *150	22500	8.064	465	20.67	
3	1/1	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.497	470	20.89	20.6
	1/2	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.452	455	20.23	
	1/3	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.473	465	20.67	
4	1/1	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.462	470	20.89	20.9
	1/2	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.479	485	21.56	
	1/3	M-20	02-Jul-20	30-Jul-20	150*150 *150	22500	8.452	455	20.23	

A.E.E

AE-2

GOOLY CONSULTANCY SERVICES
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TEST REPORT OF GRADATION FOR GSB

ıme of Client: Bruhat Bangalore Mahanagara Palike

ıdress: Yelahanka Division

ıckage No: Package - 01

ame of Work: Improvements to roads, drains and other developmental works in ward no-02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)

ame of Contractor: M/s Sathya Constructions

ame of PMC: M/s Gooly Consultancy services, Bangalore

ate of Sample ollection: 03.07.2020

hainage/Location/Land ark: 4th and 5th Main Road of Synika Vihara Layout (Ward-02)

ate of testing: 03.07.2020

eference to BIS codes: IS 2386 (Part 1) 1963 (RA 2016) Particle Size and Shape Cl 2

ayer: GSB

)ven Dry Wt (gm): 10000

Sl No	Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	As per MORTH 5th Revsion Table 400.1 (Garding V)
1	75	0	0	0.00	100.00	100
2	53	170	170	1.70	98.30	80-100
3	26.5	1615	1785	17.85	82.15	55-90
4	9.5	4580	6365	63.65	36.35	35-65
5	4.75	985	7350	73.50	26.50	25-50
6	2.36	720	8070	80.70	19.30	10-20
7	0.85	1120	9190	91.90	8.10	2-10
8	0.425	754	9944	99.44	0.56	0-5
9	pan	56	10000	100.00	0.00	-

Remarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

PMC

Gooly Consultancy Services Bangalore

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TEST REPORT OF GRADATION FOR WET MIX MACADAM

MORTH TABLE-400-11

ne of Client:	Bruhat Bangalore Mahanagara Palike
lress:	Yelahanka Division
kage No:	Package - 01
ne of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division. (Package -01)
ne of Contractor:	M/s Sathya Constructions
ne of PMC:	M/s Gooly Consultancy services, Bangalore
e of Sample lection:	16.07.2020
ainage/Location/ rk:	1st Main Road ISRO Layout (Ward-02)
e of testing:	16.07.2020
Code:	IS 2386 (Part 1) 1963 (RA 2016) Particle Size and Shape Cl 2
/er:	WMM

AE-2 / A.E.E

Oven Dry Wt (gm) 10000

il No	Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits Vide Table 400.13 as Per MORTH Specification
	53	0	0	0.00	100	100
1	45	322	322	3.22	96.78	95-100
2	22.4	2451	2773	27.73	72.27	60-80
3	11.2	2475	5248	52.48	47.52	40-60
4	4.75	2100	7348	73.48	26.52	25-40
5	2.36	980	8328	83.28	16.72	15-30
6	0.600	680	9008	90.08	9.92	8-22
7	0.075	992	10000	100.00	0.00	0-5
8						

emarks:

ontractor/Contracto r Representative

Client(AE/AEE/EE)

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TEST REPORT OF GRADATION FOR WET MIX MACADAM

MORTH TABLE-400-11

ne of Client:	Bruhat Bangalore Mahanagara Palike
lress:	Yelahanka Division
kage No:	Package - 01
ne of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division. (Package -01)
me of Contractor:	M/s Sathya Constructions
me of PMC:	M/s Gooly Consultancy services, Bangalore
te of Sample llection:	21.07.2020
ainage/Location/ rk:	3rd Main Road Synika Vihara Layout (Ward-02)
te of testing:	21.07.2020
S Code:	IS 2386 (Part 1) 1963 (RA 2016) Particle Size and Shape Cl 2
yer:	WMM

Oven Dry Wt (gm): 10000

Sl No	Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits Vide Table 400.13 as Per MORTH Specification
	53	0	0	0.00	100	100
1	45	369	369	3.69	96.31	95-100
2	22.4	2365	2734	27.34	72.66	60-80
3	11.2	1758	4492	44.92	55.08	40-60
4	4.75	1998	6490	64.90	35.10	25-40
5	2.36	1253	7743	77.43	22.57	15-30
6	0.600	895	8638	86.38	13.62	8-22
7	0.075	865	9503	95.03	4.97	0-5
8						

A.E.E

Remarks:

Contractor/Contracto r Representative

Client(AE/AEE/EE)

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EST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM

ne of Client:	Bruhat Bangalore Mahanagara Palike
ress:	Yelahanka Division
kage No:	Package - 01
ne of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
ne Contractor:	M/s Sathya Constructions
ne of PMC:	M/s Gooly Consultancy services, Bangalore
e of Sample lection:	7-Aug-20
inage/Location nd Mark:	9th A Main Road ISRO Layout Ward - 02
e of testing:	7-Aug-20
e of Mix:	Dense Bituminous Macadam

UMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
Veight of Mixture before Test, gm	500	As per MORTH Specification for DBM Grade II (50-75mm) Bitumen Content 4 5 min VG-30
Veight of Mixture after Test, gm	475	
Veight of Bitumen Extracted, gm	25	
Bitumen content in %	5	

ADATION AFTER EXTRACTION

TAL WEIGHT OF SAMPLE: 475 gms

IEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500-10
37 5	0	0 00	0 00	100 00	100
26 5	38	8 00	8 00	92 00	90 - 100
19	76	16 00	24 00	76 00	71-95
13 2	89	18 74	42 74	57 26	56-80
4 75	86	18 11	60 84	39 16	38-54
2 36	49	10 32	71 16	28 84	28-42
0 3	64	13 47	84 63	15 37	7-21
0 075	45	9 47	94 11	5 89	2-8

emarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

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ting of Construction Material - Mechanical & Chemical, Soil & Non Destructive Testing Services, Project Management Consultancy, ... Detailed Project Report, Rehabilitation, Road Safety Review & Structural design

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TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM

ame of Client:	Bruhat Bangalore Mahanagara Palike
ddress:	Yelahanka Division
ckage No:	Package - 01
ame of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
ame Contractor:	M/s Sathya Constructions
ame of PMC:	M/s Gooly Consultancy services, Bangalore
ate of Sample ollection:	12-Aug-20
hainage/Location and Mark:	2nd Main Road SFS 208 Ward No 03
ate of testing:	12-Aug-20
pe of Mix:	Dense Bituminous Macadam

ITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
Weight of Mixture before Test, gm	500	As per MORTH Specification for DBM Grade II (50-75mm) Bitumen Content 4 5 min VG-30
Weight of Mixture after Test, gm	475	
Weight of Bitumen Extracted, gm	25	
Bitumen content in %	5 0	

RADATION AFTER EXTRACTION

OTAL WEIGHT OF SAMPLE: 475 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500-10
37 5	0	0 00	0 00	100 00	100
26 5	42	8 84	8 84	91 16	90 - 100
19	75	15 79	24 63	75 37	71-95
13 2	74	15 58	40 21	59 79	56-80
4 75	46	9 68	49 89	50 11	38-54
2 36	85	17 89	67 79	32 21	28-42
0 3	62	13 05	80 84	19 16	7-21
0 075	65	13 68	94 53	5 47	

AE-2 A.E.E

Remarks:

Contractor/Contractor Representative

AE-02 Client(AE/AEE/EE)

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TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM

Name of Client:	Bruhat Bangalore Mahanagara Palike
Address:	Yelahanka Division
Package No:	Package - 01
Name of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division. (Package -01)
Name Contractor:	M/s Sathya Constructions
Name of PMC:	M/s Gooly Consultancy services, Bangalore
Date of Sample Collection:	14-Aug-20
Chainage/Location /Land Mark:	1st Cross Sushilamma Layout Ward - 02
Date of testing:	14-Aug-20
Type of Mix:	Dense Bituminous Macadam

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1. Weight of Mixture before Test, gm	500	As per MORTH Specification for DBM Grade II (50-75mm) Bitumen Content 4.5 min VG-30
2. Weight of Mixture after Test, gm	475	
3. Weight of Bitumen Extracted, gm	25	
4. Bitumen content in %	5.0	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 475 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500-10
37.5	0	0.00	0.00	100.00	100
26.5	39	8.21	8.21	91.79	90 - 100
19	90	18.95	27.16	72.84	71-95
13.2	70	14.74	41.89	58.11	56-80
4.75	86	18.11	60.00	40.00	38-54
2.36	56	11.79	71.79	28.21	28-42
0.3	80	16.84	88.63	11.37	7-21
0.075	25	5.26	93.89	6.11	2-8

Remarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

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ST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF DENSE BITUMINOUS MACADAM

of Client:	Bruhat Bangalore Mahanagara Palike
ss:	Yelahanka Division
ge No:	Package - 01
of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
Contractor:	M/s Sathya Constructions
of PMC:	M/s Gooly Consultancy services, Bangalore
of Sample ction:	14-Aug-20
nage/Location d Mark:	4th Cross Sushilamma Layout Ward - 02
of testing:	14-Aug-20
of Mix:	Dense Bituminous Macadam

UMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
eight of Mixture before Test, gm	500	As per MORTH Specification for DBM Grade II (50-75mm) Bitumen Content 4 5 min VG-30
eight of Mixture after Test, gm	476	
eight of Bitumen Extracted, gm	24	
itumen content in %	4 8	

ADATION AFTER EXTRACTION

TAL WEIGHT OF SAMPLE: 476 gms

IEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500-10
37.5	0	0 00	0 00	100 00	100
26.5	35	7 35	7 35	92 65	90 - 100
19	85	17 86	25 21	74 79	71-95
13.2	75	15.76	40 97	59 03	56-80
4.75	65	13 66	54 62	45 38	38-54
2.36	45	9 45	64 08	35 92	28-42
0.3	85	17.86	81 93	18 07	7-21
0.075	55	11.55	93 49	6 51	2-8

AE-2 A.E.E

emarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

PMC

Gooly Consultancy Services Bangalore

GOOLY CONSULTANCY SERVICES
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TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

Name of Client: Bruhat Bangalore Mahanagara Palike
Address: Yelahanka Division
Package No: Package - 01
Name of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
Name Contractor: M/s Sathya Constructions
Name of PMC: M/s Gooly Consultancy services, Bangalore
Date of Sample Collection: 7-Sep-20
Chainage/Location /Land Mark: 1st Main Road ISRO layout ward - 02
Date of testing: 7-Sep-20
Type of Mix: Bituminous Concrete

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1. Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500 17 Binder Content 5 4% min
2. Weight of Mixture after Test, gm	470	
3. Weight of Binder Extracted, gm	30	
4. Binder content in %	6 0	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 470 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0 00	0 00	100 00	100
13.2	35	7.45	7 45	92 55	90 - 100
9.5	45	9.57	17 02	82 98	70-88
4.75	85	18.09	35.11	64 89	53-71
2.36	66	14.04	49.15	50 85	42-58
1.18	74	15.74	64 89	35 11	34-48
0.6	42	8 94	73 83	26 17	26-38
0.3	23	4 89	78 72	21 28	18-28
0.15	20	4 26	82 98	17 02	12-20
0.075	40	8 51	91 49	8 51	4-10

A.E.E

Remarks:

AE-02

PMC

Gooly Consultancy Services Bangalore

GOOLY CONSULTANCY SERVICES
ISO 9001 : 2015 Certified & NABL Accreditated Laboratory as per ISO/IEC - 17025 - 2017
Corporate off : No. 230, Opp. G.R. Lavender Apartments, Sai Enclave Layout, Kothanur Dinne, J.P. Nagar 8th Phase, Bangalore - 560 076.
Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

ST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

ıe of Client:	Bruhat Bangalore Mahanagara Palike
ress:	Yelahanka Division
kage No:	Package - 01
ne of Work:	Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
me Contractor:	M/s Sathya Constructions
me of PMC:	M/s Gooly Consultancy services, Bangalore
ıte of Sample ollection:	9-Sep-20
hainage/Location and Mark:	1st cross of Balaji Layout Ward - 02
ate of testing:	9-Sep-20
ype of Mix:	Bituminous Concrete

ITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1 Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500 17 Binder Content 5 4% min
2 Weight of Mixture after Test, gm	473	
3 Weight of Binder Extracted, gm	27	
4 Binder content in %	5.4	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 473 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0 00	0 00	100 00	100
13.2	30	6 34	6 34	93 66	90 - 100
9.5	85	17 97	24 31	75 69	70-88
4.75	74	15 64	39 96	60 04	53-71
2.36	60	12 68	52 64	47 36	42-58
1.18	56	11 84	64 48	35 52	34-48
0.6	41	8 67	73 15	26 85	26-38
0.3	32	6 77	79 92	20 08	18-28
0.15	28	5 92	85 84	14 16	12-20
0.075	32	6 77	92 60	7 40	4-10

A.E.E

Gooly Consultancy Services Bangalore

Remarks:

Contractor/Contractor | Client(AE/AEE/EE) | PMC

GOOLY CONSULTANCY SERVICES

ISO 9001 : 2015 Certified & NABL Accreditated Laboratory as per ISO/IEC - 17025 - 2017

Corporate off : No. 230, Opp. G.R. Lavender Apartments, Sai Enclave Layout, Kothanur Dinne, J.P. Nagar 8th Phase, Bangalore - 560 076.
Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

ST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

e of Client: Bruhat Bangalore Mahanagara Palike

ess: Yelahanka Division

kage No: Package - 01

ıe of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)

ne Contractor: M/s Sathya Constructions

me of PMC: M/s Gooly Consultancy services, Bangalore

te of Sample llection: 11-Sep-20

ıainage/Location and Mark: 2nd Main Road of SFS 208 Ward - 03

ate of testing: 11-Sep-20

ype of Mix: Bituminous Concrete

ITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1. Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500.17 Binder Content 5.4% min
2. Weight of Mixture after Test, gm	472	
3. Weight of Binder Extracted, gm	28	
4. Binder content in %	5.6	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 472 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0.00	0.00	100.00	100
13.2	22	4.66	4.66	95.34	90 - 100
9.5	106	22.25	26.91	73.09	70-88
4.75	85	18.01	44.92	55.08	53-71
2.36	60	12.71	57.63	42.37	42-58
1.18	36	7.63	65.25	34.75	34-48
0.6	30	6.36	71.61	28.39	26-38
0.3	40	8.47	80.08	19.92	18-28
0.15	26	5.51	85.59	14.41	12-20
0.075	32	6.78	92.37	7.63	4-10

AE2

A.E.E

Remarks:

Contractor/Contractor | Client(AE/AEE/EE) | PMC

Gooly Consultancy Services, Bangalore

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Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

Name of Client: Bruhat Bangalore Mahanagara Palike
Address: Yelahanka Division
Package No: Package - 01
Name of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
Name Contractor: M/s Sathya Constructions
Name of PMC: M/s Gooly Consultancy services, Bangalore
Date of Sample Collection: 12-Sep-20
Chainage/Location /Land Mark: 4th cross Road of sushilamma Layout Ward - 02
Date of testing: 12-Sep-20
Type of Mix: Bituminous Concrete

ITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500 17 Binder Content 5 4% min
Weight of Mixture after Test, gm	471	
Weight of Binder Extracted, gm	29	
Binder content in %	5 8	

ATION AFTER EXTRACTION

WEIGHT OF SAMPLE: 471 gms

E SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0.00	0 00	100 00	100
13 2	32	6 79	6 79	93 21	90 - 100
9 5	100	21 23	28 03	71 97	70-88
75	87	18 47	46 50	53 50	53-71
36	45	9 55	56 05	43 95	42-58
18	42	8 92	64 97	35 03	34-48
6	30	6 37	71 34	28 66	26-38
3	41	8 70	80 04	19 96	18-28
5	30	6 37	86 41	13 59	12-20
75	32	6 79	93 21	6 79	4-10

Gooly Consultancy Services Bangalore

ractor/Contractor epresentative

Client(AE/AEE/EE)

PMC

Services, Project Management Consultancy,

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TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

Name of Client: Bruhat Bangalore Mahanagara Palike

Address: Yelahanka Division

Package No: Package - 01

Name of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)

Name Contractor: M/s Sathya Constructions

Name of PMC: M/s Gooly Consultancy services, Bangalore

Date of Sample Collection: 16-Sep-20

Chainage/Location /Land Mark: 4th cross road of ISAQ Layout

Date of testing: 16-Sep-20

Type of Mix: Bituminous Concrete

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1 Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500 17 Binder Content 5 4% min
2 Weight of Mixture after Test, gm	472	
3 Weight of Binder Extracted, gm	28	
4 Binder content in %	5 6	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 472 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0 00	0 00	100 00	100
13 2	31	6 57	6 57	93 43	90 - 100
9 5	98	20 76	27 33	72 67	70-88
4 75	85	18 01	45 34	54 66	53-71
2 36	48	10 17	55 51	44 49	42-58
1 18	48	10 17	65 68	34 32	34-48
0 6	30	6 36	72 03	27 97	26-38
0 3	44	9 32	81 36	18 64	18-28
0 15	28	5 93	87 29	12 71	12-20
0 075	30	6 36	93 64	6 36	4-10

Remarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

PMC

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Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

Name of Client: Bruhat Bangalore Mahanagara Palike
Address: Yelahanka Division
Package No: Package - 01
Name of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division (Package -01)
Name Contractor: M/s Sathya Constructions
Name of PMC: M/s Gooly Consultancy services, Bangalore
Date of Sample Collection: 17-Sep-20
Chainage/Location /Land Mark: 4th Main Road Synika vihara Layout
Date of testing: 17-Sep-20
Type of Mix: Bituminous Concrete

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1 Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500 17 Binder Content 5 4% min
2 Weight of Mixture after Test, gm	472	
3 Weight of Binder Extracted, gm	28	
4 Binder content in %	5 6	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 472 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0 00	0 00	100 00	100
13 2	28	5 93	5 93	94 07	90 - 100
9 5	102	21 61	27 54	72 46	70-88
4 75	78	16 53	44 07	55 93	53-71
2 36	55	11 65	55 72	44 28	42-58
1 18	32	6 78	62 50	37 50	34-48
0 6	43	9 11	71 61	28 39	26-38
0 3	37	7 84	79 45	20 55	18-28
0 15	22	4 66	84 11	15 89	12-20
0 075	28	5 93	90 04	9 96	4-10

AE-2
A.E.E

Remarks:

Contractor/Contractor Representative

Client(AE/AEE/EE)

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Non Destructive Testing Services, Project Management Consultancy, Safety Review & Structural design

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Contact: +91-80-42277023/24, 9535200024, Email : info@gcsfirm.com, goolyconsultancyservices@yahoo.com, www.gcslabindia.com

TEST REPORTS OF BITUMEN CONTENT & GRADATION DETERMINATION OF BITUMINOUS CONCRETE

Name of Client: Bruhat Bangalore Mahanagara Palike
Address: Yelahanka Division
Package No: Package - 01
Name of Work: Improvements to roads, drains and other developmental works in ward no- 02 & 03 under road development head in Chief Minister Nava Nagarothan grants of Yelahanka division. (Package -01)
Name Contractor: M/s Sathya Constructions
Name of PMC: M/s Gooly Consultancy services, Bangalore
Date of Sample Collection: 17-Sep-20
Chainage/Location /Land Mark: 5th Main Road Synika vihara Layout
Date of testing: 17-Sep-20
Type of Mix: Bituminous Concrete

BITUMEN CONTENT DETERMINATION

Description	Sample 1	Requirements
1. Weight of Mixture before Test, gm	500	As per MORTH Specification for Grade II Vide Table 500.17 Binder Content 5.4% min
2. Weight of Mixture after Test, gm	473	
3. Weight of Binder Extracted, gm	27	
4. Binder content in %	5.4	

GRADATION AFTER EXTRACTION

TOTAL WEIGHT OF SAMPLE: 473 gms

SIEVE SIZE in mm	Weight Retained in gm	% Retained	Cumulative % Retained	% Passing	Requirements as per MORTH Specification Table 500.17
19	0	0.00	0.00	100.00	100
13.2	32	6.77	6.77	93.23	90 - 100
9.5	98	20.72	27.48	72.52	70-88
4.75	66	13.95	41.44	58.56	53-71
2.36	48	10.15	51.59	48.41	42-58
1.18	66	13.95	65.54	34.46	34-48
0.6	38	8.03	73.57	26.43	26-38
0.3	36	7.61	81.18	18.82	18-28
0.15	26	5.50	86.68	13.32	12-20
0.075	22	4.65	91.33	8.67	4-10

Remarks:

Contractor/Contractor

AE/AEE/EE)

PMC

Gooly Consultancy Services, Project Management Consultancy, Structural design